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Soviet Logistic Support for Ground Operations

By GRAHAM TURBIVILLE

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It has become customary among western military writers, when discussing the capabilities of Soviet ground forces opposite NATO, to express a thought something like the following: "While the Soviets have a sizeable superiority in divisions, tanks, and artillery, the austere Soviet logistic system is suitable only for supporting a short war". In fact, the logistic capability to support Soviet combat forces in even a short war has been assessed by some observers as marginal. Among the potential problems cited have been the Soviet reliance on logistic personnel and vehicles mobilised from the civilian economy, the difficulties in maintaining open lines of communication (LOCs) from the USSR, the high ratio of combat equipment and troops to support elements in Soviet divisions, and an apparent rigid assumption on the part of Soviet planners that a future war in Europe, nuclear or conventional, will be quickly concluded.

Have the Soviets then, despite their serious approach to building and continually up-grading their impressive ground force formations facing NATO, neglected to provide an adequate and flexible logistic support system capable of meeting the demands of nuclear and/or conventional warfare? A closer look at Soviet logistic doctrine and operational concepts may suggest otherwise.

Logistic stockpile requirements

A central question has been the type of war the Soviets are prepared to fight. Are they tied to the fast-moving nuclear operations advocated in doctrine, which require a mobile but limited logistic tail, or could the Soviets, if necessary, sustain their forces in a protracted conflict? While it is not within the scope of this article to dwell on the Soviet view of future wars in any depth, it is worth briefly addressing the question as regards logistics.

As has been well documented, the Soviets have given increased recognition since the mid-1960s to the prospect that a future war will include at least a conventional phase, if not continuing at a non-nuclear level for its duration. This recognition has manifested itself both in Soviet military writing, and Soviet/Warsaw Pact exercise scenarios, where conventional operations play a far more important role than had previously been the case. Combat "without the use of nuclear weapons" has been discussed not only in the context of the combat arms, but in the area of logistics as well. Lieut-General Novikov, former Logistics Chief of Staff of the Soviet Armed Forces, wrote as early as 1966 that "at present we have a logistical arm capable of ensuring mobile operations by the troops in any situation, with or without the use of nuclear weapons".[1] This type of statement has been reiterated since, and the Soviet assumption seems to be that despite the apparent increased requirement for conventional ammunition, and the lengthened operations in a non-nuclear situation, the logistic burden for the first weeks will be no greater, as there will not be the massive losses of transport and other logistic resources and facilities from enemy nuclear strikes.

The question of logistic requirements in future wars is never, of course, discussed in specific terms by the Soviets, but their classification of logistic stockpiles indicates they have given something more than mere recognition to the possibility that a war of longer duration than the few weeks usually postulated could take place. Military supply stockpiles are designated as emergency reserves, mobilisation reserves, strategic reserves and state reserves. Both emergency and mobilisation reserves are intended for use in the initial stages of war. Emergency reserves are located with deployed ground force formations (divisions, armies, *fronts*/groups of forces/military districts) and are to be used for the immediate conduct of military operations. Mobilisation reserves are to be used to replace combat losses in the course of theatre operations, and are established on the basis of the huge losses the Soviets expect in a nuclear war. This would seem to be some-

Soviet logistic doctrine stresses the resupply of units as close to the front lines as possible. Tank being refuelled in the field.

thing of a bonus in the event of a conventional conflict where losses would be less. Strategic reserves consist of those material items placed under the control of the General Staff, and are not envisioned for early use. State reserves comprise those resources over and above the stockpiles under military control.

If a European conflict went according to prescribed planning factors (i.e. nuclear rates of advance of perhaps 80 km per day; non-nuclear advance rates of about half that) it is highly unlikely that either strategic or state reserves would have to be used before Pact forces reached their principal objectives. It is stipulated that strategic and state reserves must be adequate to continuously supply the armed forces until industry is able to expand its production and meet wartime supply demands. In World War II this period was approximately 90 days of supply. The greater demands of modern war and the likelihood of heavy losses from enemy strikes (as perceived by Soviet planners) probably means that at least a 90 day supply of ammunition, fuel, technical supplies and other items would be maintained to ensure that surviving stockpiles would be adequate until industry was prepared to produce required material. Soviet discussions of the supply requirement question indicate then, that peacetime logistic stockpiles are probably established at substantial levels, and that in their view, war material may be required for periods far greater than the few weeks (or less) necessary to successfully conclude the type of blitzkrieg campaign across Europe implicit in Soviet planning factors and doctrine.[2]

Even if it were assumed, however, that Soviet military supply stockpiles were sufficient to conduct a high intensity conventional war in Europe lasting many weeks, and the Soviet industry could gear-up to produce required supply and equipment items before reserves were diminished, the ability of Soviet forces to conduct more than the most limited operations would depend primarily on the adequacy of transportation and maintenance resources, the ability to maintain LOCs, and the overall organisation and efficiency of the Soviet logistic system.

Divisional rear services and the "delivery forward" concept

The streamlining of Soviet divisional rear service units, while receiving a great deal of attention in the late 1950s and early 1960s, had, in fact, begun during the last years of World War II in response to the growing mobility of divisional combat units and their faster rates of advance. Rear service elements were decreased in size (as were divisions overall) with particular emphasis placed on up-grading the mobility of ammunition supply, fuel supply, and maintenance elements. When speaking of this trend in World War II divisions, a recent Soviet publication stated the following:

> The trend in the organisation of formations and units was a desire to make them more compact, manoeuvrable, and better controlled. The size of the line, support and maintenance sub-units was reduced, while the firepower and striking force rose.[3]

In 1941, a Soviet rifle division had a total of 14,483 authorised personnel, which by 1945 had decreased to 11,700 men, about the size of the current Soviet motorised rifle division.[4] The rear service units now found in Soviet motorised rifle and tank divisions are, then, the result of many years' emphasis on mobility, a process given impetus by the rapid rates of advance envisioned in a nuclear campaign, but conditioned over the last ten years by the realisation that divisions may well have to fight throughout operations with conventional weapons only.

The logistic make-up of motorised rifle and tank divisions is nearly identical, with each division having these principal logistic units: a motor transport battalion for the transport of ammunition, fuel and general purpose cargo; a mobile maintenance battalion with specialised shop vans designed to repair armour, soft-skin vehicles, small arms, and technical equipment as close to the front lines as possible; a medical battalion; mobile food preparation elements; and a depot system stocking required supply items. Each line regiment has organic motor transport and maintenance companies, as well as medical and mobile food preparation elements. Transport, maintenance, medical and food distribution assets are also found at battalion level. These divisional rear service units are smaller in size than those found in some western divisions, and are designed to keep pace with the fastest Soviet advances, while reducing complex organisational and command and control problems in the fluid battlefield situations the Soviets expect to encounter. In Soviet divisions, logistic resources are not used for what are considered non-essentials, but are designated to deliver material in accord with a strictly adhered-to supply priority of ammunition first,[5] followed by POL, technical supplies, rations and clothing. In this way, the Soviets believe that supplies necessary for the accomplishment of the division's mission can be delivered in a timely manner for the duration of the division's role in the operation, though the comfort of the troops is certainly a secondary consideration. Reserves of critical supply items over and above those items necessary for the accomplishment of the division's mission are maintained at each organisational

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level within the division, and can be used only with the permission of the respective unit commanders. So the Soviets, in order to have a mobile, easily handled logistic tail, have cut the size of divisional rear service units, instituted a strict order of supply priorities, and while allowing supply leeway in the accomplishment of divisional missions, have reduced to some extent the staying power of a division dependent only on its own resources. The sustainability of Soviet theatre-wide operations is not, however, dependent upon the quantity of supplies carried at division level, or even upon the ability of divisional motor transport to return to rear bases and pick up required material. The task of the Soviet division is to move forward, with organic logistic resources servicing only the internal needs of the division. The Soviets operate under the "delivery forward" principle, in which higher headquarters directly supply and service the next two lower headquarters using their own organic logistic assets. Thus, a Soviet *front* (army group) would be required to transport material to army and division level using *front* transport. An army would supply subordinate divisions and regiments, and so on. In this manner, the tactical logistic system (division and below) is linked to the operational system (*front* and army) and up to the central support network spreading both across the Soviet Union and over the theatre of operations. Since the burden of supplying and maintaining engaged divisions falls upon higher headquarters, Soviet planners have put the bulk of their logistic resources at army and *front* level. The advantages of the system are obvious—the highly mobile divisions are free to operate without being encumbered by slow-moving supply shuttles of organic vehicles, while the logistic back-up is maintained at army and *front*. At army level, for example, there will be found one or more motor transport regiments, which with perhaps 1,000 plus trucks per regiment, can be used to support subordinate divisions generally, or be used to augment divisional resources by the attachment of designated army motor transport elements to the divisional motor transport battalion. At *front* level, there will be one or more motor transport brigades, in support of subordinate armies and their divisions. In World War II, for example, the Transbaikal *Front* in the Soviet Far East had under *front* subordination one motor transport brigade, two motor transport regiments, and ten independent motor transport battalions—this being in addition to the transport found within the subordinate armies and divisions.[6] The motor transport picture at army and *front* is paralleled by other logistic formations to include sizeable maintenance resources, LOC repair and construction units (road construction and railway troops), and tactical pipeline construction units.

Overall, the Soviets have designed a logistic system which meets the requirements of their tactical doctrine for a totally mobile division, but which also contains a considerably greater number of logistic assets than would be apparent by looking at divisions in isolation. With the major concentration of rear service resources at *front* and army levels, the flexibility exists to employ these resources in a variety of contingencies, from supporting combat forces in a fast moving nuclear war, to maintaining line divisions in a longer conventional conflict through general support or through unit attachments.

The MAZ-537 tractor with 65 metric ton trailer, used principally for the transport of heavy equipment. It can also shift large loads of ammunition in pallets and boxed supplies.

It may be worth while, at this point, to examine a few individual areas of Soviet logistics, with the aim of determining their role in the overall logistic system.

Motor transport

It is acknowledged by Soviet logisticians, that motor transport will be the principal means of delivering supplies from *front* level down. In a nuclear war, motor transport will assume particular importance, where destruction to railroads in the combat zones will preclude any kind of reliable delivery to front-line units by rail. Also cited is the greater flexibility possessed by motor transport, a necessity when one considers that a *front* motor transport unit may directly supply an engaged division.

The standard Soviet general purpose cargo carrier is the URAL-375 truck, judged by western experts to be an outstanding vehicle. Possessing all-wheel drive (6 × 6), it has an off-road capability well suited to front-line ammunition deliveries. With a rated dirt-road cargo lift of 4·5 metric tons, it is judged capable of lifting perhaps 75 per cent again as much when operating on paved surfaces.[7] Other models frequently associated with motor transport units are the URAL-377 (a 6 × 4 version of the URAL-375) and ZIL-131 cargo carriers. POL tank vehicles are based on the chassis of general purpose cargo trucks, the URAL-375 and ZIL-131 versions being most preferred in the forward area. Having tank capacities of 5,000 and 4,200 litres respectively, they are, of course, all-wheel drive vehicles. A variety of other fuel trucks are found in the Soviet inventory, some with carrying capacities as high as 8,000 litres.

Of major importance, when considering the lift capabilities of Soviet motor transport units, is the widespread use of cargo and fuel trailers, a practice which can more than double the lift potential of the truck. Thus, a URAL-375 fuel truck and trailer unit has a total lift capability of 9,200 litres, while a URAL-375

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Tactical pipeline refuelling point and advance POL depot.

cargo truck/trailer unit could transport some 9·5 metric tons on dirt roads. Aside from greatly increasing logistic lift, maintenance requirements are also much less than if additional trucks were used in lieu of trailers. As regards technical servicing in motor transport units, the Soviets have claimed that in some units at least, an average of only 2–3 per cent of cargo trucks are deadlined for repair or servicing, a low figure compared with any other army.[8]

Aside from the standard cargo carriers described above, mention should also be made of the cargo lift represented by Soviet heavy tractor-trailer units, utilised primarily for transporting armour and other heavy equipment. Principal among these is the MAZ-537 tractor and 65 metric ton trailer, which could transport large quantities of palletised ammunition or other cargo. Similar vehicles were used by US forces in World War II for this purpose, when their main role as heavy equipment transporters was not required or became secondary to other transport needs.

Tactical pipeline construction

The Soviets believe that fuel and lubricant requirements could amount to about 50 per cent of the total supply quantities required. *Military Strategy* indicated that this could equal 25,000 tons a day for a *front* offensive operation.[9] This figure was also quoted in an East German military publication which added that about 300,000 tons would be required for an entire *front* operation.[10] While motor transport will play a major role in transporting POL, Soviet planners will also rely heavily on tactical pipelines to move fuel forward over longer distances. Pipeline construction brigades of several battalions are assigned to Soviet *fronts*, and are required to construct one or two tactical pipelines in the direction of the main effort for support of the ground forces. Additional pipelines are constructed for the tactical air army. In the rear service exercise Neman, pipeline was reportedly laid over many hundreds of kilometres with 24 fuel trucks being refilled simultaneously at one terminal. One type of pipeline employed by the Soviets (Type 150) can supply 2,000 tons of fuel a day. Overall, the Soviets expect a great deal from their pipeline construction units, and they have received frequent mention in the Soviet military press. Their successful employment would significantly reduce the number of motor transport vehicles required.

Maintaining lines of communication

Railway and road construction units have been quite active in Soviet and Pact exercises over the last decade. Extensive damage (to railways in particular) is expected both in the interior of the Soviet Union and throughout the forward area as well. For this reason, many exercises include a phase focusing on the rapid repair of damaged rail lines, bridges, and roads under simulated nuclear conditions.

The Soviets claim that a floating railway bridge can be put up in several hours. Considerable publicity was given to the construction of such a bridge by Soviet Railway Troops in the 1967 exercise Dnepr. Railway Troops (introduced into the Soviet Armed Forces in 1918) are also utilised throughout the year in work on civilian railway construction projects. The Chief of Soviet Railway Troops, Colonel General Alexei Kryukov, stated recently that "it is perhaps difficult to

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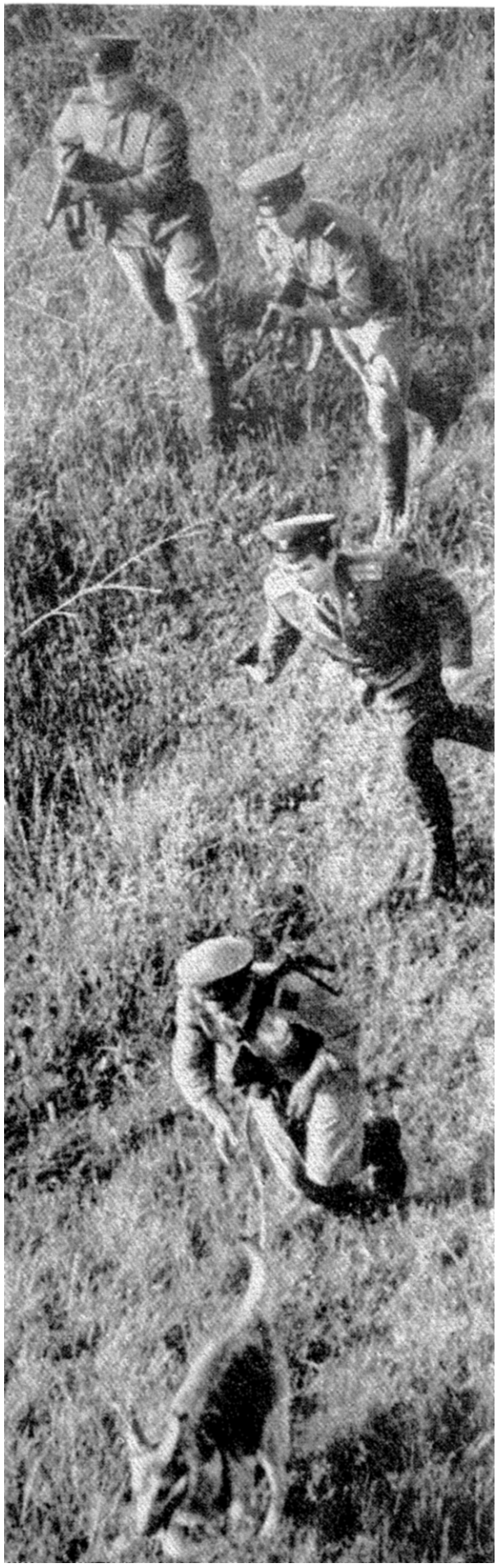

mention a single road in our country, in the restoration, building, or rebuilding of which the Railway Troops have not taken part".[11] It is probable then, that railway construction units are as technically proficient as any troops in the Soviet Armed Forces, and the military press has indicated that this proficiency is frequently applied to the types of problems the Soviets expect to encounter in wartime.

Specialised road construction units are tasked to take a major role in the repair and construction of main supply routes. These units augment the efforts of other engineer units organic to divisions and those found at higher headquarters. The Neman manoeuvres gave particular attention to the efforts of road construction battalions in building and restoring troop and supply routes. During the exercise, use was made of truck-carried plywood roadbeds for aiding the passage of vehicles over wet, marshy areas. A ZIL-164 tractor and semi-trailer can transport, according to the Soviets, 78 m of plywood road, and this type of equipment, in addition to the standard road building machinery found in many engineer units, is apparently organic to Soviet road construction battalions.

Responsibility for LOC security is not only shared by operational units and rear service elements, but within the Soviet Union falls primarily on the Border Troops and Internal Troops, thus freeing many regular units for front-line duty. Supply lines and facilities on the territory of non-Soviet Warsaw Pact countries would be protected by the various militarised security forces of the Pact member nations, no doubt with close Soviet supervision. In Poland, for example, protection of the vital LOCs running across that country would be the responsibility of the Polish Territorial Defence Forces, who are trained in small unit tactics and rear area security functions, and total some 73,000 men.[12]

All in all, Soviet planners believe that LOC maintenance and security will be a major problem in a future war (particularly a nuclear conflict), and as a consequence have undertaken a number of measures to reduce or eliminate movement and supply bottlenecks resulting from road and rail interdiction.

Air resupply

The magnitude of Soviet operations against NATO, as envisioned by most western military observers, will mean that even the most ambitious aerial resupply efforts by Soviet cargo aircraft will make little dent in the overall requirements of several *fronts*. Assuming that Soviet ammunition consumption will be about equal to that of US forces, it would require 25 flights of the largest Soviet cargo aircraft (the AN-22) to meet the ammunition needs alone of a tank division engaged in high intensity combat for one day. In addition, AN-12 and AN-22 aircraft (the principal medium and heavy air cargo carriers), are apparently designated to be employed extensively in airborne operations, and this would seem to have the first priority for aircraft

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Border guards may be used for protection of the LOC, freeing combat troops for use in the forward area.

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allocations. All of this considered, however, the performance of Soviet Military Transport Aviation in the October Middle East war, has revealed an impressive airlift capability, which in the right situation could make a significant contribution to filling some supply and equipment requirements. These would in all likelihood include troop replacements (720 unequipped troops per AN-22) and critical equipment items. For example, AN-22s have demonstrated for the public their capability to transport Frog nuclear-capable tactical rockets, Scud nuclear-capable tactical missiles, and the Ganef SA-4 air defence missile system. Helicopters are frequently used at the tactical level to transport ammunition and POL in exercises and would certainly be used in such a role in wartime. Generally speaking, however, most consumable supplies will be transported by motor transport and pipeline at *front* level and below, while rail will continue to play a major part in moving supplies from central support facilities in the USSR.

Mobilisation of rear service elements

Virtually every major Soviet and Warsaw Pact exercise, while mainly publicising tactical play by ground units, is a rear service exercise as well. Dnepr in 1967, Dvina in 1970, Yug in 1971, and Shield in 1972 all featured heavy participation by rear service units. Small unit training for logistic personnel goes on year round, paralleling that of other ground force arms in the Soviet training programme. Soviet military literature, most notably *Rear and Supply of the Soviet Armed Forces*, is replete with accounts of training undertaken by motor transport, maintenance, medical and other logistic support units. It could be reasonably assumed, therefore, that active duty rear service units are as well trained in their specialties as are the combat arms in theirs. But in addition to active duty combat and rear service formations, there are those personnel and equipment items that would be mobilised in wartime. The Soviets have indicated that the most extensive mobilisation will occur in the ground forces. Aside from those troops designated to fill up divisions at less than full strength,[13] mobilisation will consist in large measure of the call-up of reserve transport, construction, medical, and maintenance personnel, as well as their equipment. Reservists are those individuals who have completed regular military service, and who are obligated under Soviet law to undergo periodic military training (the strict enforcement of which is debatable). No reserve units, as such, are maintained, and with some exceptions, most reservists seem destined to augment understrength units already in being. The Soviets claim a rapid, simplified mobilisation system. Perhaps the best illustration of what this mobilisation will entail in the area of logistics, was presented in the major rear service exercise Neman, taking place in July and August 1968, just prior to, and in preparation for, the Soviet invasion of Czechoslovakia.

Army General Maryakhin, commander of the exercise and then Chief of the Rear,[14] writing in the 14 August 1968 edition of *Red Star*, gave the following summary of reserve rear service participation:

> ... It is no secret that the exercises necessitated the temporary requisitioning of thousands of units of powerful technical equipment and motor transport from the national economy and the removal of thousands of reservists from kholkhoz and sovkhoz fields, as well as from industrial enterprises and state institutions at a time when heavy harvest work was at its height throughout the country.... It is gratifying to know that our national economy... was able to allot everything the army needed without detriment to the fulfilment of the annual economic plans.

Other articles indicated that the reservists were called up on very short notice, brought into the exercise without preparations or halts, and performed extremely well. The reservists reported in the vehicles they used in the national economy, with the equipment in good working order. While most reservists and their equipment were integrated into understrength active duty units, there were a few units which consisted "almost entirely of reserve officers, sergeants, and enlisted men". Many of the mobilised troops and vehicles seem to have been designated to augment (or form) motor transport, maintenance, and construction units, and it was also indicated that the majority of medical personnel and ambulance drivers were reservists. Soviet assessments of reserve performance overall, indicated considerable satisfaction with both troops and equipment. Special praise was given to vehicle drivers. High technical competence should certainly be expected from individuals whose peacetime jobs (vehicle driving and maintenance, heavy equipment operators, electricians, etc.) are identical or similar to their military occupational specialties. As regards mobilised equipment, civilian trucks and much of the engineer equipment are the same models as those found in the military, with Ural, Zil and Kraz designs as common in industrial enterprises as in the Groups of Forces.

In speaking of the mobilisation system as a whole, Army General Maryakhin stated that "these exercises prove conclusively that, if the necessity arises, the use of the reservists and civilian equipment will significantly increase the capability of the logistic support of the armed forces".[15] In total, then, the Soviets seem well satisfied with the system and the ability of mobilised troops and equipment to carry out required logistic functions. The system would seem to provide a quick means of assembling those resources necessary to meet the needs of Soviet ground forces in a war of several weeks' duration, as well as establishing a good basis on which to build the logistic support network necessary for a protracted conflict lasting months.

Conclusions

Detailed estimates of just how long and well Soviet theatre forces could be sustained in a general war, can be made only with the most complete knowledge of Soviet contingency plans, supply requirements and stockpiles, transportation assets, and the myriad other related logistic needs of the forces opposite NATO. While such data are not available, a review of what is known of the Soviet logistic system, should cause some hesitation in dismissing Soviet logistic capabilities as suitable only for the support of a swiftly concluded conflict.

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The Soviets have for some years now, accepted that a war in Europe may entail something more than a nuclear supported race to the Channel ports. It remains a Soviet requirement that supply stocks be maintained at levels adequate to support combat forces until industry can be put on a wartime footing. While Soviet divisions have a mobile, streamlined logistic tail (a concept developed in World War II), the "delivery forward" principle dictates that the bulk of logistic resources be found at army and *front* level. Rear service formations at these levels are substantial, and can be employed in a variety of logistic contingencies, with units and resources allocated or modified as the operational situation demands. In a general war, the Soviets will mobilise a considerable number of rear service personnel and vehicles from the civilian economy. Most of the reservists, who have had previous military experience, will be assigned to military specialties requiring the same skills as those they employed in civilian life. The mobilisation system has worked smoothly in exercises, and it should be recalled that Neman was something more than an exercise, preparing as it did, lines of communication for the invasion of Czechoslovakia. The mobilisation system is a real Soviet strength, enabling the USSR to establish an impressive wartime logistic network, one which would be difficult or impossible for any country to maintain in peacetime.

The emphasis given logistic matters in the military press and exercises, as well as the continued up-grading of transport, maintenance, and materiel-handling equipment and procedures, is a reflection of the Soviet recognition that inadequate logistic support is a frequent limiting factor in the successful conduct of combat operations. All available evidence would seem to indicate that this recognition, along with Soviet uncertainties as to the nature of a future war in Europe, has resulted in the establishment of a logistic system well suited to a short nuclear war, but possessing the flexibility to supply theatre forces under conventional conditions for prolonged periods.

1 Lieut.-General M. Novikov, "Combat Logistics Today", *Soviet Military Review*, No. 5, 1966, p. 41.

2 For a discussion of reserve stockpiles, see Marshal V. D. Sokolovsky, ed., *Military Strategy*, 3rd edn, pp. 322–324 1968, in the edition translated by the Foreign Technology Division, US Air Force Systems Command.

3 Col. General N. A. Lomov, ed., *Scientific-Technical Progress and the Revolution in Military Affairs*, p. 114 (Moscow: Military Publishing House of the Ministry of Defence), 1973, in the edition published and translated under the auspices of the US Air Force.

4 Ibid., p. 115.

5 Ammunition carried with the division in organic motor transport is apparently not used in preparation fire, the period of the heaviest ammunition consumption. Ammunition for preparation fire is pre-stocked at firing positions, presumably from the supplies of higher echelons, allowing the division to maintain high rates of fire without expending their mobile stocks. It should also be noted that in the pursuit, POL may replace ammunition as the top priority supply item.

6 Colonel N. Malyugin, "Some Questions on the Use of Motor Transport in the Military Campaign in the Far East (August–September 1945)", *Voyenno-istoricheskiy zhurnal*, No. 1, 1969, pp. 103–111, see particularly Table 1.

7 The question of rated truck capacities in wartime does not usually mean a great deal. A frequent US practice has been the excessive overloading of cargo vehicles when the situation demanded. A notable example was the "Red Ball Express", which in World War II drove many a 2½ ton truck into the ground to keep the tanks moving. That such an effort should not be possible on the basis of rated truck capacities, is of little consolation to a defeated enemy.

8 Colonel I. Belykh and Lieut.-Col. A. Chaikovskiy, "Transport Facilities of a Regiment and its Utilisation", *Til i snabzheniye sovetskykh vooruzhennykh sil*, March 1969, pp. 71–75.

9 Sokolovsky, op. cit., p. 325.

10 These figures, cited in *Militaertechnik*, July 1970, pp. 297–299, apparently include fuel requirements for the *front's* tactical air army.

11 Col. General A. Kryukov, "The Soviet Railway Troops", *Soviet Military Review*, No. 8, 1974, p. 4.

12 *Military Balance 1974–1975*, p. 14 (London: International Institute for Strategic Studies), 1974.

13 See ibid., pp. 9, 98, for a discussion of the manning levels of Soviet divisions.

14 The Chief of the Rear of the Soviet Armed Forces, who is also a Deputy Minister of Defence, is responsible for the co-ordination of logistic activities for the Soviet military. Maryakhin, who died in 1972, was replaced by the former Group of Soviet Forces, Germany commander, Viktor Kulikov.

15 *Krasnaya zvezda*, 25 July 1968, p. 1.

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